

Anthropogenic sulphate aerosol forcing

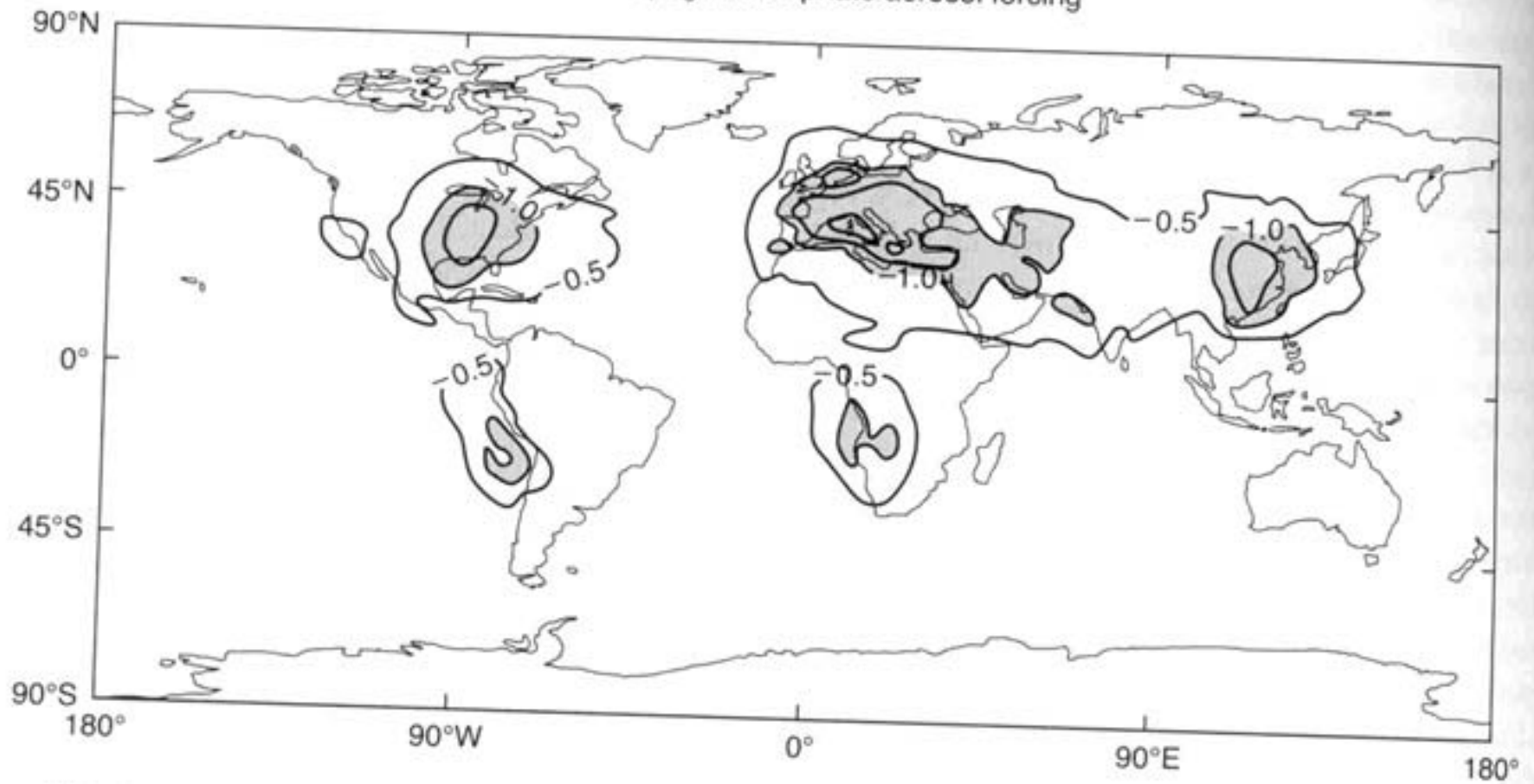


Figure 4.3: Geographic distribution of annual mean direct radiative forcing (Wm^{-2}) from anthropogenic sulphate aerosols (after Kiehl and Briegleb, 1993). The calculations use the sulphate distribution calculated by Langner and Rodhe (1991). The contour interval is 0.5 Wm^{-2} and values below -1 Wm^{-2} are shaded.

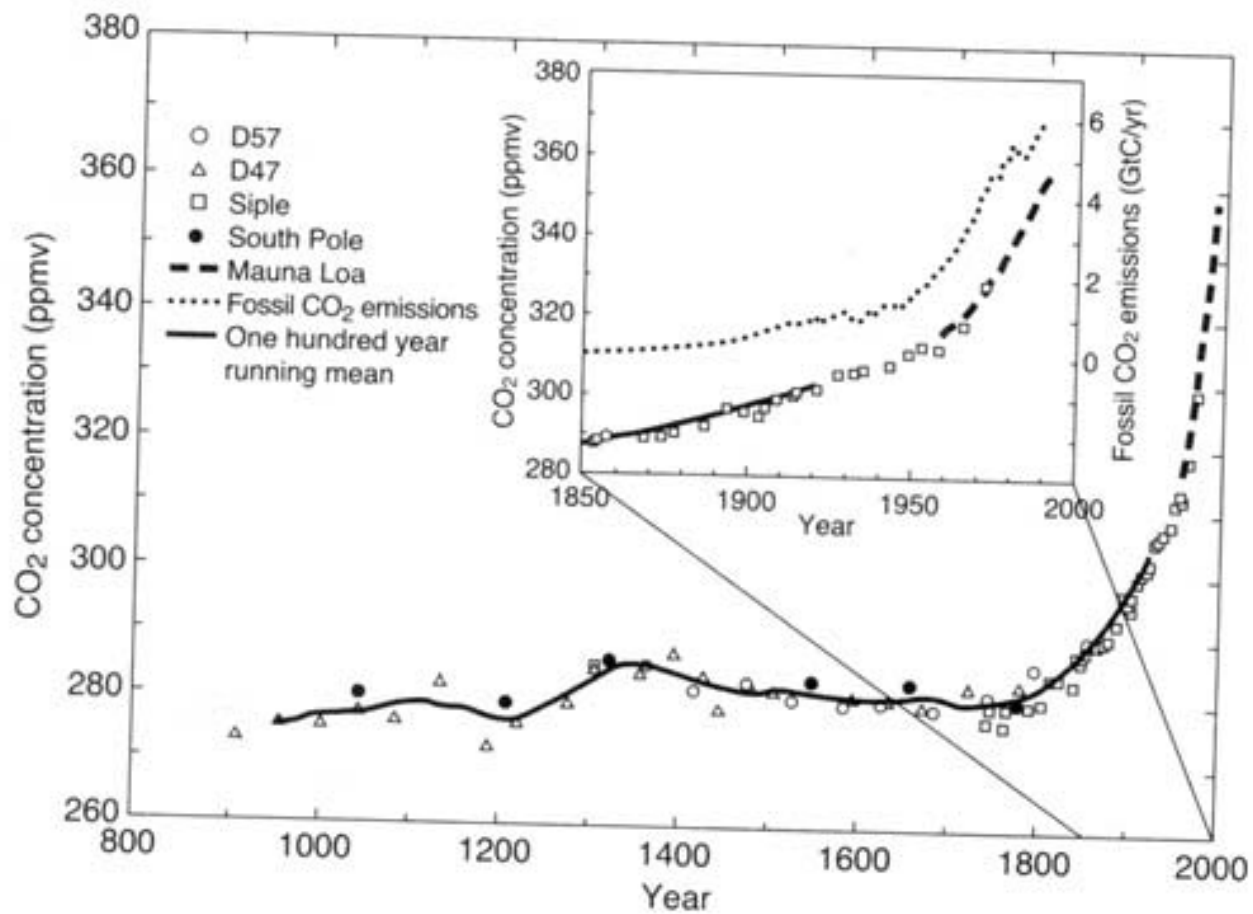


Figure 1.5: CO₂ concentrations over the past 1000 years from the recent ice core record and (since 1958) from the Mauna Loa measurement site. The inset shows the period from 1850 in more detail including CO₂ emissions from fossil fuel. Data sources: D47 and D57 (Barnola et al., in press); Siple (Nefel et al., 1985 and Friedli et al., 1986) and South Pole (Siegenthaler et al., 1988). The smooth curve is based on a 100yr running mean. All ice core measurements were taken in Antarctica.

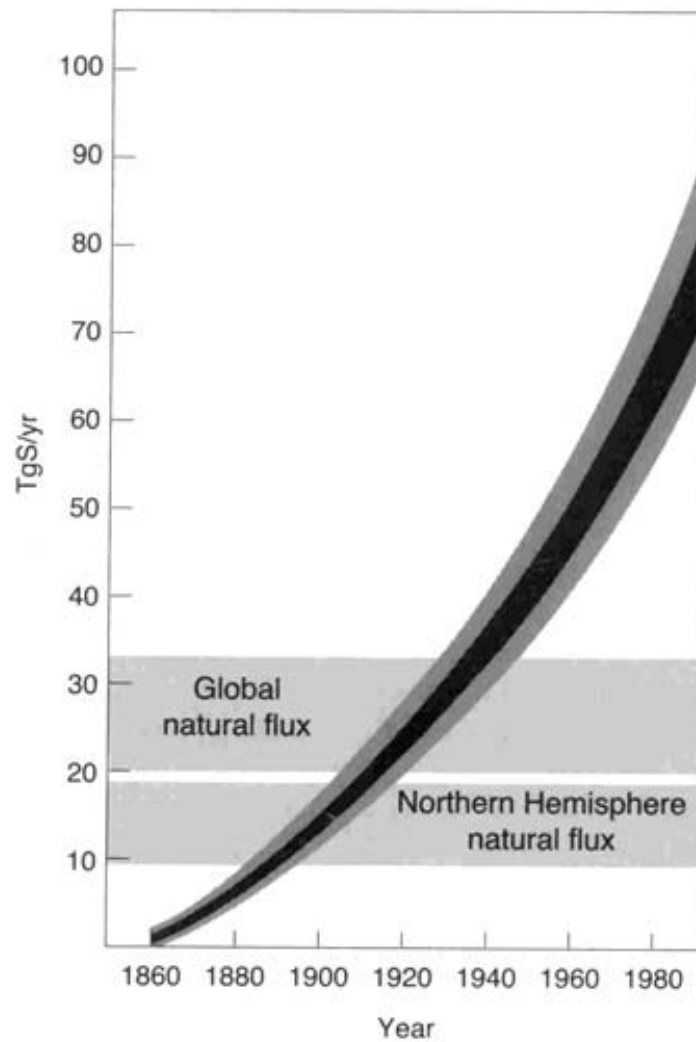


Figure 3.2: Time history of global emission of SO_2 (in TgS/yr) and estimates of the global and Northern Hemisphere natural flux (from Charlson *et al.*, 1992). Anthropogenic sulphur is emitted mainly (~90%) in the Northern Hemisphere and emissions greatly exceed the natural emissions. Width of shading represents the uncertainty.